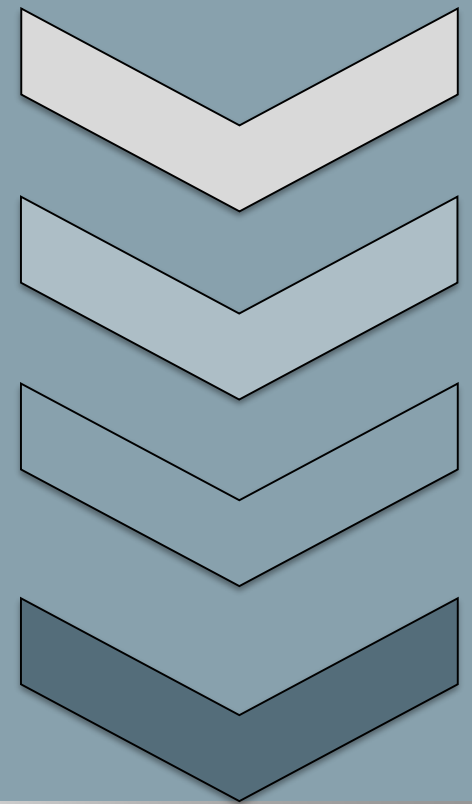


# THE MISSISSIPPI OPIOID AND HEROIN DATA COLLABORATIVE



**Provisional Data Report  
First Quarter of 2018**

**Mississippi Board of Pharmacy**

**Mississippi Bureau of Narcotics**

**Mississippi State Department of Health**

**Mississippi Department of Mental Health**

**7/26/2018**

## DATA AND REPORT OVERVIEW

- This report summarizes data on opioid prescriptions dispensed in Mississippi, fatal drug overdoses reported to Mississippi Bureau of Narcotics, naloxone administration for suspected overdoses by Emergency Medical Services, drug-related arrests, and treatment for opioid-related disorders within facilities certified by the Mississippi Department of Mental Health.
- The goal of this report is to provide the public and policy makers with timely information on key indicators measuring the scope of the opioid epidemic in Mississippi.
- Most of the statistics presented in this report are preliminary and based on available data at the time of analysis. Such provisional counts could change since data collection is a continuous process. In addition, finalizing data counts requires data evaluation and validation. The report is updated quarterly as new data become available. While we strive to present the latest data in a quarterly format, some of the data sources used in this report are released on an annual basis only. Detailed information regarding each of the data sources used in the report is presented in the technical notes on page 8.

Opioid  
prescriptions

Overdose deaths

Treatments for  
opioid-related  
disorders

Naloxone  
administrations

Drug-related  
arrests

## ACKNOWLEDGMENTS

The conceptualization and production of this report is a collaborative effort by all participating state agencies: Mississippi Department of Health, Mississippi Department of Mental Health, Mississippi Bureau of Narcotics, and Mississippi Board of Pharmacy.

This project was supported by Grant No. 2017-PM-BX-K036 awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

## PRESCRIPTION MONITORING PROGRAM DATA

### FINDINGS

- During 2017, over 3.3 million opioid prescriptions were dispensed in Mississippi. On average, over half of million dosage units (e.g., pills) were dispensed every day during this year.
- Compared to the first three months of 2017, there were 168,156 fewer opioid prescriptions dispensed during the first three months of 2018. This was a 19.4% decrease. During the same period, the number of dosage units dispensed decreased even more by 22.6% or 10,971,850 pills.

**Figure 1. Number of Opioid Prescriptions  
Dispensed in MS, 2017-2018**



**Figure 2. Number of Opioid Dosage Units  
Dispensed in MS, 2017-2018**



#### Opioid Prescriptions, 2017

- Total number: 3,302,879
- Average number per month: 275,240
- Average number per day: 9,049
- The rate was 110.5 opioid prescriptions per 100 persons - enough for each person in Mississippi to have 1 opioid prescription during 2017

#### Opioid Dosage Units, 2017

- Total number: 182,882,444
- Average number per month: 15,240,204
- Average number per day: 501,048
- The rate was 6,119 opioid dosage units per 100 persons - enough for each person in Mississippi to have a supply of 61 opioid pills during 2017

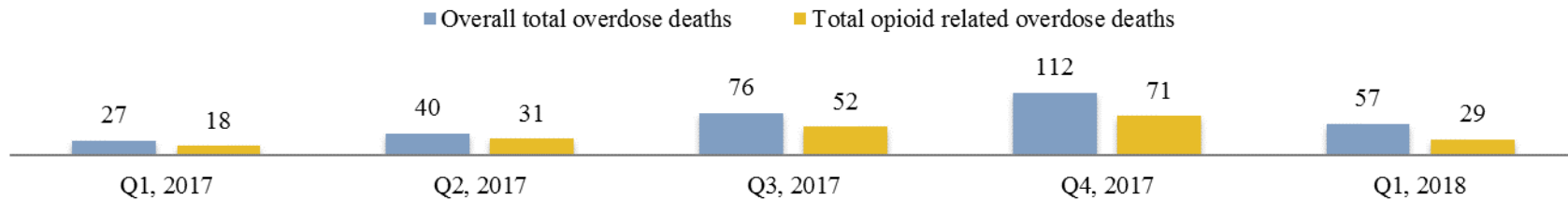
**CONSIDERATIONS:** This report identified a considerable decline in the number of opioid prescriptions within a year. Such downward movement could be driven, in part, by statewide educational initiatives. For example, the Mississippi Bureau of Narcotics along with the Board of Pharmacy and the Mississippi Department of Mental Health have organized numerous town hall meetings to educate communities about the dangers of opioid overconsumption during the last year. In addition, the Mississippi State Department of Health has campaigned actively among the Mississippi's medical community since early 2017. This campaign involves presentations for health care providers on the scope of the state's opioid epidemic, the latest opioid treatment guidelines, and prevention strategies. One of these strategies includes the utilization of the state PMP data for identifying non-medical use of opioids. Recent encouraging trends in opioid prescriptions highlight the importance of such data-driven educational events. Nonetheless, Mississippi's prescription rates remain high and warrant continuous educational outreach and preventive efforts.

## SUSPECTED DRUG OVERDOSE DEATHS

### FINDINGS

- The preliminary number of suspected overdose deaths reported to Mississippi Bureau of Narcotics reached 256 during 2017. Opioid-related deaths accounted for over two-thirds (173 or 67.6%) of those deaths.
- During the first quarter of 2018, there were 57 reported overdose deaths in Mississippi; of which 29 (50.9%) involved opioids. Compared to the first quarter of 2017, deaths for every category except "fentanyl and prescription related overdose deaths" were up in the first quarter of 2018. This may be due to an increase in drug overdose deaths; however, it is also possible that the process of drug overdose death reporting has improved.

**Figure 3. Suspected Overdose Deaths Reported to Mississippi Bureau of Narcotics, MS, 2017-2018**



**Table 1. Number and Percent of Suspected Overdose Deaths reported to Mississippi Bureau of Narcotics by Type of Involved Substance, MS, 2017-2018**

	Q1, 2017	Q2, 2017	Q3, 2017	Q4, 2017	Q1, 2018
Overall total overdose deaths	27	40	76	112	57
Total opioid related overdose deaths	18	31	52	71	29
Prescription opioid related overdose deaths	7	12	24	39	15
Fentanyl related overdose deaths	2	7	8	3	1
Fentanyl and prescription related overdose deaths	4	4	11	12	2
Heroin related overdose deaths	4	5	9	11	7
Heroin and prescription related overdose deaths	1	1	0	0	1
Heroin and fentanyl related overdose deaths	0	2	0	6	3
Other related overdose deaths	9	7	10	23	24
Prescription related overdose deaths	0	2	14	18	4

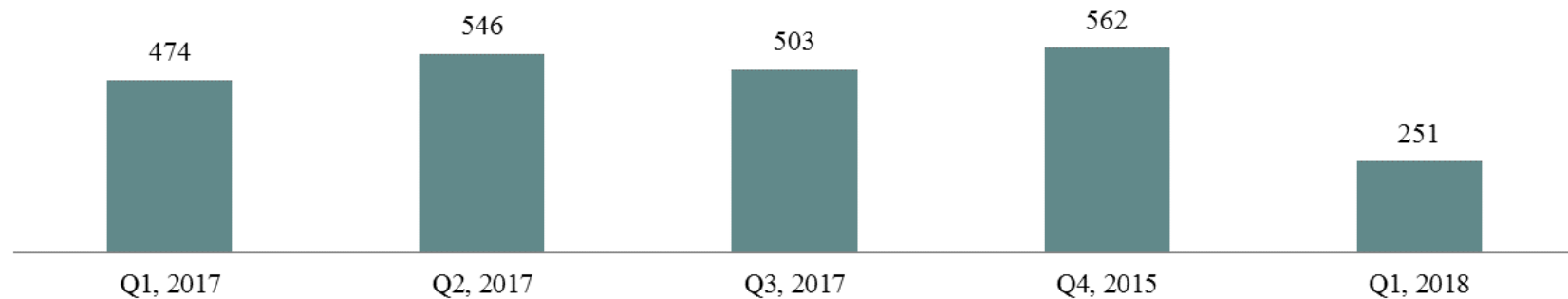
**CONSIDERATIONS:** The accurate assessment of drug-related fatalities depends on complete and good quality data. The reliability of mortality data, however, has been impacted by several constraints such as insufficient resources, training, or time for performing thorough death investigations. In addition, our state lacks a centralized system for connecting different entities involved in the compilation and reporting of mortality data. Efficient collaboration among state agencies, educational outreach for coroners, and standardized protocols for drug overdose investigation and reporting are measures that can improve drug-related mortality surveillance.<sup>1</sup>

## NALOXONE ADMINISTRATION

### FINDINGS

- Emergency Medical Services (EMS) data revealed that naloxone was reported to be administered 2,085 times during 2017.
- The number of naloxone administrations reported so far for the first three months of 2018 is 251 (Figure 4).

**Figure 4. Naloxone Administration by EMS: Number of Cases, MS, 2017-2018**



Note: Naloxone administration is performed when an opioid toxicity is suspected. Data are preliminary.

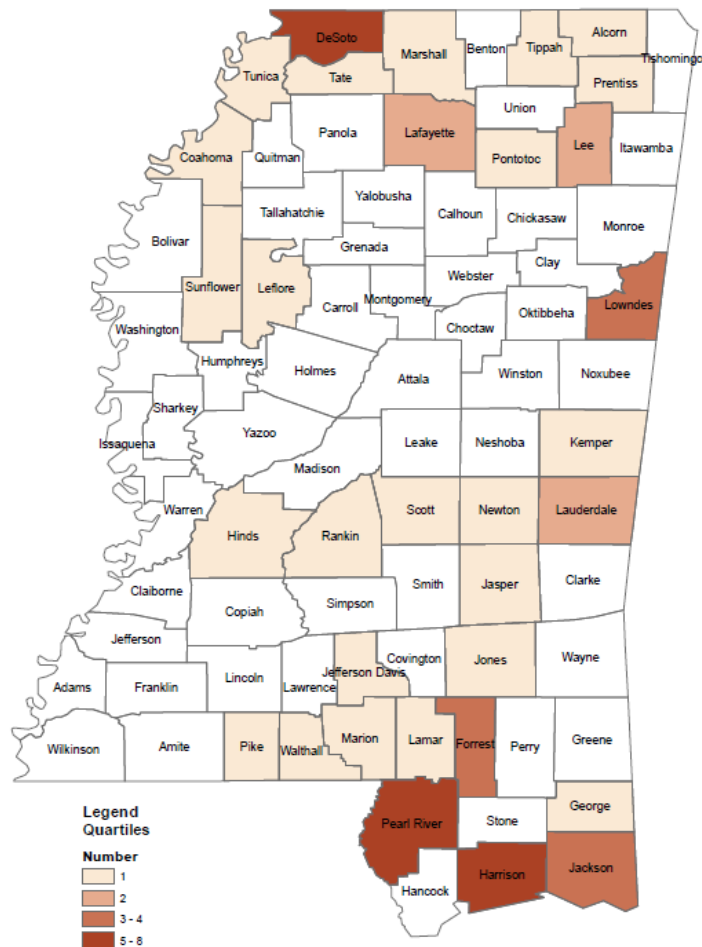
**CONSIDERATIONS:** Opioid-associated toxicity can lead to respiratory depression and cardiac arrest, both of which require an emergency response. The life-saving drug naloxone, an opioid antagonist, is used to reverse opioid overdose. The emergence and growing popularity of highly toxic synthetic opioid substances necessitates ready access to naloxone for patients with opioid use disorders.

**IMPORTANT MESSAGE:** In a continued effort to curb the opioid epidemic in Mississippi, State Health Officer Dr. Mary Currier signed a standing order that covers, without a prescription, the dispensing and administration of a drug that reverses the effects of an opioid overdose. With this standing order, pharmacies will be able to provide naloxone to a family member, friend, or other person in a position to assist someone at risk of opioid overdose. It is recommended that patients currently taking high doses of opioids prescribed for pain, those misusing prescription opioids, those using illicit opioids such as heroin or fentanyl, as well as those who live with or are often in the presence of people with an opioid use disorder, know how to use naloxone and have it within reach.

## NALOXONE ADMINISTRATIONS AND SUSPECTED OVERDOSE DEATHS BY COUNTY

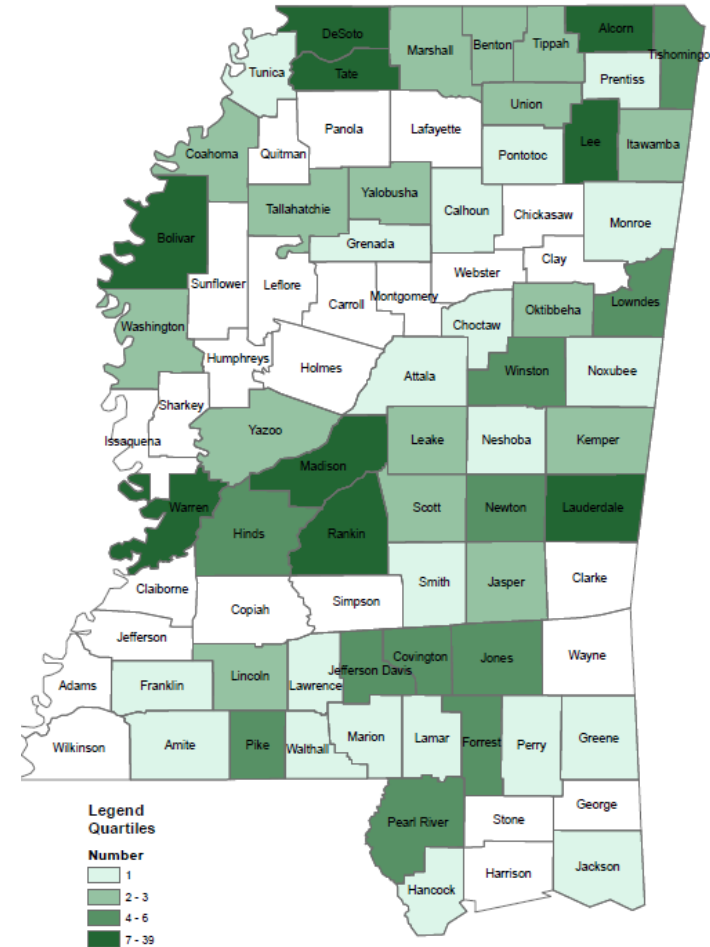
- The top 5 counties, DeSoto (8), Pearl River (6), Harrison (5), Lowndes (4), and Forrest (3) accounted for 45.6% (26) of all suspected overdose deaths.
- The Top 5 counties, Rankin (39), DeSoto (20), Tate (14), Lee (10) and Madison (10) accounted for 40.1% (93) of all Naloxone administrations.

Number of Suspected Overdose Deaths by County, MS Q1, 2018



Data Source: Mississippi Bureau of Narcotics

Number of Naloxone Administrations by County, MS, Q1, 2018



Data Source: Mississippi State Department of Health

Note: Records for missing or erroneous values for county of residence and such cases were excluded.

This analysis included 232 cases.

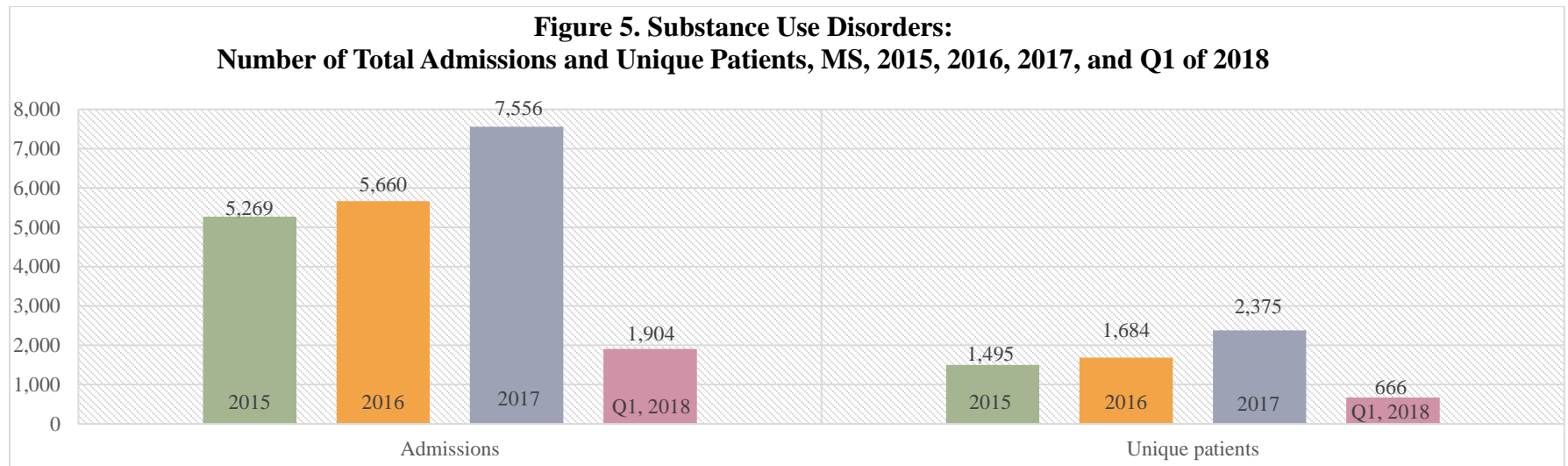
## TREATMENT ADMISSIONS FOR OPIOID USE DISORDERS BY TYPE OF ADMISSION

### FINDINGS

- The following table and figure display data on opioid-related admissions to facilities certified by the Department of Mental Health (DMH).
- Table 2 categorizes the use of opioids as the primary, secondary, or tertiary substance. On average, there were over three admissions per patient during each of the studied years. There were close to 2,000 admissions during the first quarter of 2018.
- Figure 5 displays the total (primary, secondary, and tertiary) admissions. The number of total opioid-related admissions increased by 7.4% between 2015 and 2016 and by 33.5% between 2016 and 2017. The number of unique patients admitted for treatment of opioid-related disorder substance jumped by 12.6% between 2015 and 2016 and by 41.0% from 2016 to 2017.

**Table 2. Number of Admissions and Unique Patients, Department of Mental Health, MS, 2015, 2016, 2017, and Q1 of 2018**

	2015		2016		2017		Q1 2018	
	Admissions	Patients	Admissions	Patients	Admissions	Patients	Admissions	Patients
Primary	2,938	838	3,080	941	4,545	1,379	1,215	404
Secondary	1,589	444	1,783	500	2,147	680	458	174
Tertiary	742	213	797	243	864	316	231	88
<b>Total</b>	<b>5,269</b>	<b>1,495</b>	<b>5,660</b>	<b>1,684</b>	<b>7,556</b>	<b>2,375</b>	<b>1,904</b>	<b>666</b>

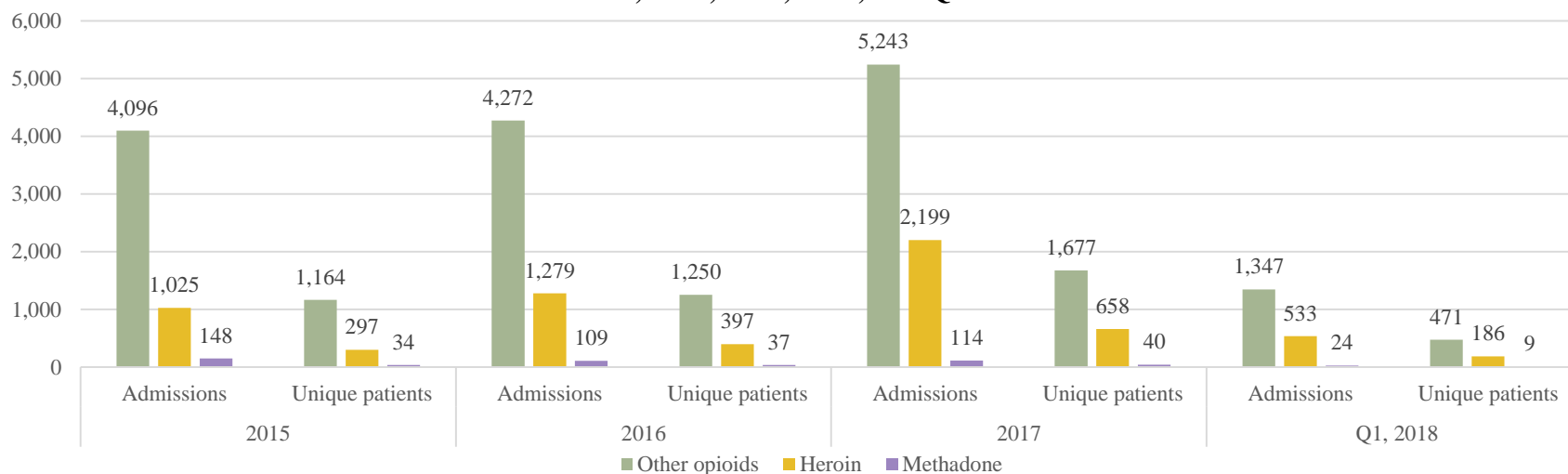


## TREATMENT ADMISSIONS FOR OPIOID USE DISORDERS BY TYPE OF OPIOID

### FINDINGS

Figure 6 categorizes the type of opioid involved. The largest category listed as “other opioids” includes prescription opioids and represented 77.7% of all opioids during 2015. This percentage decreased, however, to 69.4% during 2017 due to a spike in heroin-related admissions. While the number of admissions for use of prescription opioids increased by 28% between 2015 and 2017, the number of heroin-related admissions more than doubled, from 1,025 admissions in 2015 to 2,199 admissions in 2017. Admissions for methadone dependence were rare and such admissions declined during the study period.

**Figure 6. Treatments Admissions and Unique Patients by Type of Opioid:  
MS, 2015, 2016, 2017, and Q1 of 2018**



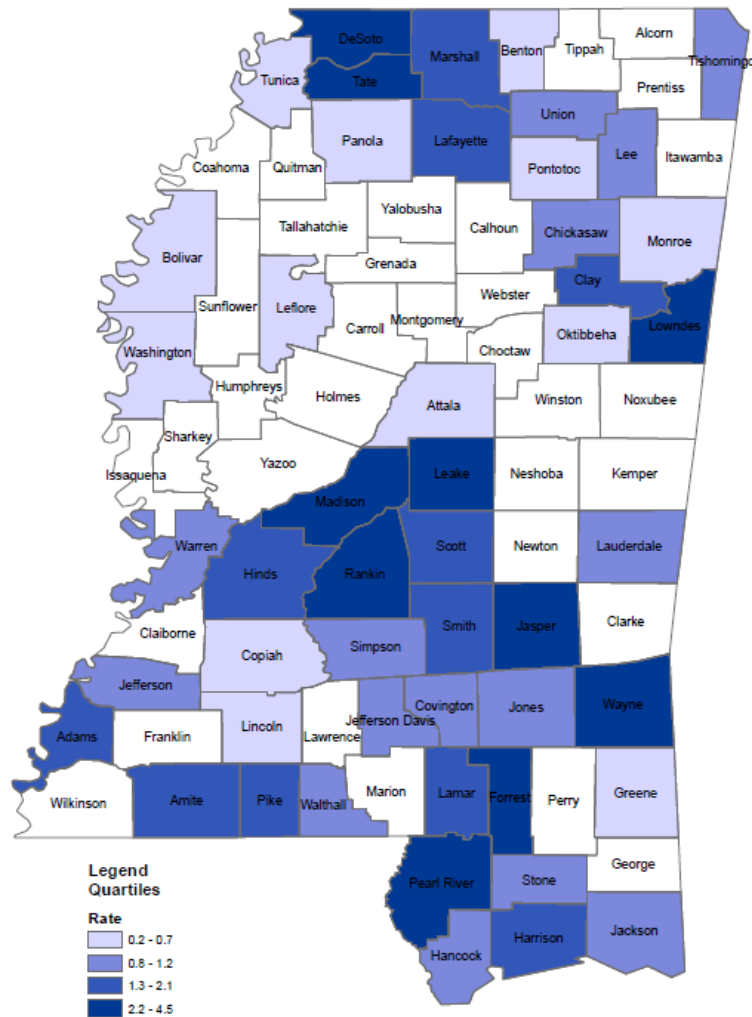
### CONSIDERATIONS

- The Substance Abuse and Mental Health Services Administration (SAMHSA) estimates that 121,000 Mississippians are in need of substance use disorder treatment services.<sup>2</sup> Currently, our state does not have the capacity to provide treatment for all the patients in need.
- The Department of Mental Health data system for capturing admissions and treatments is continually being updated and modified; therefore, the statistics presented in this report are current as of 3/31/2018 and subject to changes.



## DRUG-RELATED CRIME DATA

**Rates of Reported Drug-Related Arrests per 1,000 Persons:  
MS, Q1, 2018**



Data Source: Mississippi Department of Public Safety and Mississippi Bureau of Narcotics  
Note: Twenty eight counties do not have any cases reported. These counties are presented in white.

### FINDINGS

#### Drug-Related Arrests, 2017:

- The total number of drug-related crimes reported in 2017 was 19,650, a rate of 6.6 arrests per 1,000 residents.
- On average, 1,638 drug-related crimes were reported each month during 2017.
- During 2017, the greatest numbers of drug-related arrests were reported in the following counties: DeSoto (3,449), Hinds (2,118), Harrison (1,746), Rankin (1,628), and Madison (986).
- The five counties with highest rates of drug-related crimes per 1,000 persons were DeSoto (19.6), Pearl River (17.6), Tate (13.3), Lowndes (13.2), and Forrest (13.0).

**Drug-Related Arrests, First Quarter of 2018:** The number of drug-related arrest during the first quarter of 2018 was 4,454.

**Pharmacy Burglaries:** Six (15.8%) of the 38 pharmacy burglaries in the state occurred in the town of Meridian during 2017. During the first quarter of 2018, there were 9 pharmacy burglaries and 2 attempts. Five of the nine burglaries were in DeSoto County.

**Table 1. Drug-Related Crime Data, MS, 2017**

Type of Crime	Q1, 2017	Q2, 2017	Q3, 2017	Q4, 2017	Q1, 2018
	Number	Number	Number	Number	Number
Drug-related arrests	5,284	5,184	4,818	4,364	4,454
Pharmacy burglaries	11	11	12	4	9

Data Source: Mississippi Department of Public Safety and Mississippi Bureau of Narcotics

## COUNTY-LEVEL DATA: Q1, 2018

**Table 3. Suspected Overdose Deaths, EMS Naloxone Administrations, and Drug-Related Arrests Reported by County, MS, Q1, 2018**

County	Number of Suspected Overdose Deaths	Number of EMS Naloxone Administrations,	Number of Reported Drug-Related Arrests	Drug-Related Arrest Rates per 1,000 Persons	County	Number of Suspected Overdose Deaths	Number of EMS Naloxone Administrations	Number of Reported Drug-Related Arrests	Drug-Related Arrest Rates per 1,000 Persons
Adams	0	0	67	2.1	Leflore	0	1	11	0.4
Alcorn	8	1	0	0.0	Lincoln	2	0	6	0.2
Amite	1	0	16	1.3	Lowndes	6	4	186	3.1
Attala	1	0	7	0.4	Madison	10	0	226	2.2
Benton	2	0	2	0.2	Marion	1	1	0	0.0
Bolivar	7	0	14	0.4	Marshall	3	1	76	2.1
Calhoun	1	0	0	0.0	Monroe	1	0	12	0.3
Carroll	0	0	0	0.0	Montgomery	0	0	0	0.0
Chickasaw	0	0	21	1.2	Neshoba	1	0	0	0.0
Choctaw	1	0	0	0.0	Newton	6	1	0	0.0
Claiborne	0	0	0	0.0	Noxubee	1	0	0	0.0
Clarke	0	0	0	0.0	Oktibbeha	2	0	11	0.2
Clay	0	0	27	1.4	Panola	0	0	13	0.4
Coahoma	3	1	0	0.0	Pearl River	6	6	223	4.0
Copiah	0	0	19	0.7	Perry	1	0	0	0.0
Covington	4	0	15	0.8	Pike	5	1	79	2.0
DeSoto	20	8	782	4.5	Pontotoc	1	1	7	0.2
Forrest	6	3	302	4.0	Prentiss	1	1	1	0.0
Franklin	1	0	0	0.0	Quitman	0	0	0	0.0
George	0	1	0	0.0	Rankin	39	1	361	2.4
Greene	1	0	7	0.5	Scott	3	1	42	1.5
Grenada	1	0	0	0.0	Sharkey	0	0	0	0.0
Hancock	1	0	52	1.1	Simpson	0	0	22	0.8
Harrison	0	5	328	1.6	Smith	1	0	34	2.1
Hinds	4	1	482	2.0	Stone	0	0	19	1.1
Holmes	0	0	0	0.0	Sunflower	0	1	0	0.0
Humphreys	0	0	0	0.0	Tallahatchie	2	0	0	0.0
Issaquena	0	0	0	0.0	Tate	14	1	62	2.2
Itawamba	3	0	0	0.0	Tippah	3	1	0	0.0
Jackson	1	3	164	1.2	Tishomingo	4	0	24	1.2
Jasper	2	1	68	4.1	Tunica	1	1	2	0.2
Jefferson	0	0	8	1.1	Union	2	0	32	1.1
Jefferson Davis	0	0	0	0.0	Walthall	1	1	18	1.2
Jones	4	1	65	1.0	Warren	7	0	36	0.8
Kemper	3	1	0	0.0	Washington	3	0	19	0.4
Lafayette	0	2	95	1.8	Wayne	0	0	55	2.7
Lamar	1	1	96	1.6	Webster	0	0	0	0.0
Lauderdale	7	2	78	1.0	Wilkinson	0	0	0	0.0
Lawrence	1	0	0	0.0	Winston	4	0	0	0.0
Leake	2	0	60	2.7	Yalobusha	3	0	0	0.0
Lee	10	2	102	1.2	Yazoo	2	0	0	0.0

Note: The zero values in this table may signify either that cases of overdose deaths, naloxone administrations, and drug-related crimes have not occurred or that such cases did occur but were not reported by the relevant authorities.

## TECHNICAL NOTES

### DATA SOURCES

**The Prescription Monitoring Program:** This is a statewide electronic database designed to collect information on the dispensing of controlled substances. These data are used to inform the public about current trends in prescription drug use and assist medical professionals in making informed clinical decisions as well as to prevent the illegitimate use of controlled substances. The PMP data are collected by the Mississippi Board of Pharmacy. The findings presented in this report include prescriptions for opioid analgesics and opioid-containing cough medications.

**Drug-Related Mortality Data:** The Mississippi Bureau of Narcotics collects data on overdose deaths from reports filed by coroners. In this report, death counts are current as of 3/31/2018. The counts are provisional and may change because of pending investigations. Additionally, not all coroners may have reported data on overdose deaths. Therefore, the reported data on overdose death counts may be incomplete.

**Mississippi Emergency Medical Services Data:** The Mississippi State Department of Health collects state-level data and maintains a cutting-edge database on all episodes of emergency medical care delivered by Emergency Medical Services (EMS). The data set contains a narrative component and structured data elements such as patient demographics, main patient complaint, medical procedures performed, medications administered, and rationale for 911 call.

**Treatment Admissions for Opioid Use Disorder:** This report summarizes data on admissions reported by substance use disorder treatment providers that are certified by the Mississippi Department of Mental Health (DMH). Presented in this report are summary statistics on represent all outpatient or inpatient services, including medication-assisted treatment, provided by the 39 DMH-certified treatment providers 665 residential beds across the state. Treatments within non-DMH certified facilities and general hospital admissions for substance use disorders are not a part of this report.

**Drug-Related Crime Data:** The arrest data reflect all drug-related offenses including the manufacture, sales, and possession of any controlled substance. These data may not be complete because of underreporting by local police offices. Additionally, crime statistics are influenced by the scope of law enforcement activities. An increased level of law enforcement, for example, may lead to increased arrest rates for particular offenses.

**Population Estimates for Mississippi:** Rates were calculated using the 2016 Mississippi population estimates released by the U.S. Census Bureau. Accessed on 11/1/2017 at: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>.

#### References:

1. Recommendations and Lessons Learned for Improved Reporting on Drug Overdose Deaths on Death Certificates. Council of State and Territorial Epidemiologists. April 2016. Accessed on 11/10/2017 at: [http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/PDFs/PDFs2/4\\_25\\_2016\\_FINAL-Drug\\_Overdos.pdf](http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/PDFs/PDFs2/4_25_2016_FINAL-Drug_Overdos.pdf).
2. Mississippi - FY2018-2019 SABG Behavioral Health Assessment and Plan Table 3 SABG Persons in need/receipt of SUD treatment. Substance Abuse and Mental Health Administration.

## THE PROJECT: DESCRIPTION AND GOALS

### THE MISSISSIPPI OPIOID AND HEROIN DATA COLLABORATIVE (MS-OHDC)

Four state agencies have united to transform a seemingly hopeless and overwhelming situation into an opportunity for developing data-driven policy changes aimed at combating the current opioid epidemic and preventing future drug-related crises.

### GOALS

Improve Data  
Collection and Data  
Sharing

Perform  
Epidemiological  
Research

Disseminate  
Information

Educate and Prevent

Expand Treatment  
Capacity

Save Lives

Reduce Drug-  
Related Crimes

Build Community  
Support

